



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

**Division of Facilities Construction and Management**

**DFCM**

## **STANDARD LOW BID PROJECT**

**October 20, 2008**

# **ELEVATOR UPGRADES AND MODERNIZATION CONSTRUCTION TRADES AND APPLIED TECHNOLOGY BUILDINGS**

**SALT LAKE COMMUNITY COLLEGE  
REDWOOD ROAD CAMPUS  
SALT LAKE CITY, UTAH**

DFCM Project Number 08010660

Lerch, Bates & Associates  
8089 South Lincoln, Suite 300  
Littleton, Colorado 80122

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Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at <http://dfcm.utah.gov> or are available upon request from DFCM.

DFCM Supplemental General Conditions dated July 15, 2008  
DFCM General Conditions dated May 25, 2005.  
DFCM Application and Certification for Payment dated May 25, 2005.

Technical Specifications : Lerch, Bates & Associates  
Drawings: None

**The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at <http://dfcm.utah.gov>**

# NOTICE TO CONTRACTORS

Sealed bids will be received by the Division of Facilities Construction and Management (DFCM) for:

**ELEVATOR UPGRADES AND MODERNIZATION**  
**CONSTRUCTION TRADES AND APPLIED TECHNOLOGY BUILDINGS**  
**SALT LAKE COMMUNITY COLLEGE - REDWOOD ROAD CAMPUS**  
**SALT LAKE CITY, UTAH**  
**DFCM PROJECT NO: 08010660**

Bids will be in accordance with the Contract Documents that will be available at 10:00 AM on Monday, October 20, 2008, and distributed in electronic format only on CDs from DFCM, 4110 State Office Building, Salt Lake City, Utah and on the DFCM web page at <http://dfcm.utah.gov>. For questions regarding this project, please contact Bob Anderson, DFCM, at 801-652-6754. No others are to be contacted regarding this bidding process. The construction estimate for this project is \$180,000.00.

A **mandatory** pre-bid meeting will be held at 1:30 PM on Thursday, October 23, 2008 in the Construction Trades Building at the Redwood Road Campus of Salt Lake Community College in Salt Lake City, Utah. Meet at 1<sup>ST</sup> floor elevator. All bidders wishing to bid on this project are required to attend this meeting.

Bids will be received until the hour of 3:00 PM on Wednesday, November 5, 2008 at DFCM, 4110 State Office Building, Salt Lake City, Utah 84114. Bids will be opened and read aloud in the DFCM Conference Room, 4110 State Office Building, Salt Lake City, Utah. NOTE: Bids must be received at 4110 State Office Building by the specified time.

A bid bond in the amount of five percent (5%) of the bid amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the bid.

The Division of Facilities Construction and Management reserves the right to reject any or all bids or to waive any formality or technicality in any bid in the interest of DFCM.

**DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT**

Marla Workman, Contract Coordinator  
4110 State Office Building, Salt Lake City, Utah 84114

## **PROJECT DESCRIPTION**

Modernize one hydraulic passenger elevator at the Applied Technology Building and one freight elevator located at the Construction Trades Building. Provide all labor, engineering, transportation, tools, services, supervision, materials, and equipment-related building work necessary for and incidental to satisfactory completion of required work as indicated in Contract Documents. Provide all required staging, hoisting, and movement of new equipment, reused equipment, or removal of existing equipment.

All bidding elevator modernization contractors must have and maintain journeyman and apprentice certification from approved by the United States Department of Labor.

After the successful bidding contractor is awarded Notice to Proceed, the Construction Trades Building Freight Elevator Modernization can commence as soon as possible and while class is in session.

The Applied Technology Building Hydraulic Passenger Elevator Modernization may only begin after Spring Commencement (approximately the second week in May 2009).

Project must be substantially completed by August 14, 2009.



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES  
**Division of Facilities Construction and Management**

**DFCM**

## PROJECT SCHEDULE

<b>PROJECT NAME: ELEVATOR UPGRADES AND MODERNIZATION CONSTRUCTION TRADES AND APPLIED TECHNOLOGY BUILDINGS SALT LAKE COMMUNITY COLLEGE - REDWOOD ROAD CAMPUS SALT LAKE CITY, UTAH</b>				
<b>DFCM PROJECT NO. 08010660</b>				
<b>Event</b>	<b>Day</b>	<b>Date</b>	<b>Time</b>	<b>Place</b>
Bidding Documents Available	Monday	October 20, 2008	10:00 AM	DFCM 4110 State Office Bldg SLC, UT and the DFCM web site *
<b>Mandatory</b> Pre-bid Site Meeting	Thursday	October 23, 2008	1:30 PM	Meet at 1 <sup>ST</sup> floor elevator Construction Trades Bldg Salt Lake Community College Redwood Road Campus SLC, UT
Last Day to Submit Questions	Thursday	October 30, 2008	2:00 PM	Bob Anderson– DFCM e-mail bobanderson@utah.gov Fax 801-538-3267
Addendum Deadline (exception for bid delays)	Monday	November 3, 2008	2:00 PM	DFCM web site *
Prime Contractors Turn In Bid and Bid Bond	Wednesday	November 5, 2008	3:00 PM	DFCM 4110 State Office Bldg SLC, UT
Sub-contractor List Due	Thursday	November 6, 2008	3:00 PM	DFCM 4110 State Office Bldg SLC, UT Fax 801-538-3677
Substantial Completion Date	Friday	August 14, 2009	4:00 PM	

\* **NOTE:** DFCM's web site address is <http://dfcm.utah.gov>



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

**Division of Facilities Construction and Management**

**DFCM**

## BID FORM

NAME OF BIDDER \_\_\_\_\_ DATE \_\_\_\_\_

To the Division of Facilities Construction and Management  
4110 State Office Building  
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Instructions to Bidders", in compliance with your invitation for bids for the **ELEVATOR UPGRADES AND MODERNIZATION CONSTRUCTION TRADES AND APPLIED TECHNOLOGY BUILDINGS - SALT LAKE COMMUNITY COLLEGE - REDWOOD ROAD CAMPUS - SALT LAKE CITY, UTAH - DFCM PROJECT NO. 08010660** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: \_\_\_\_\_

For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

\_\_\_\_\_ DOLLARS (\$\_\_\_\_\_) (In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by **August 14, 2009**, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of **\$500.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of \_\_\_\_\_

The undersigned Contractor's License Number for Utah is \_\_\_\_\_.

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract.

The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

\_\_\_\_\_  
(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

\_\_\_\_\_

Respectfully submitted,

\_\_\_\_\_  
Name of Bidder

ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Authorized Signature

# INSTRUCTIONS TO BIDDERS

## 1. Drawings and Specifications, Other Contract Documents

Drawings and Specifications, as well as other available Contract Documents, may be obtained as stated in the Invitation to Bid.

## 2. Bids

Before submitting a bid, each contractor shall carefully examine the Contract Documents, shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the Contract Documents. If the bidder observes that portions of the Contract Documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Representative and the necessary changes shall be accomplished by Addendum.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Invitation to Bid prior to the deadline for submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. **THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.**

If the bid bond security is submitted on a bid bond form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. **NOTE: A cashier's check cannot be used as a substitute for a bid bond.**

## 3. Contract and Bond

The Contractor's Agreement will be in the form found in the specifications. The Contract Time will be as indicated in the bid. The successful bidder, simultaneously with the execution of the Contract Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the contract sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for subcontractors will be specified in the Supplementary General Conditions.



**4. Listing of Subcontractors**

Listing of Subcontractors shall be as summarized in the “Instructions and Subcontractor’s List Form”, which are included as part of these Contract Documents. The Subcontractors List shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the Contract Documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements is subject to a debarment hearing and may be debarred from consideration for award of contracts for a period of up to three years.

**5. Interpretation of Drawings and Specifications**

If any person or entity contemplating submitting a bid is in doubt as to the meaning of any part of the drawings, specifications or other Contract Documents, such person shall submit to the DFCM Project Manager a request for an interpretation thereof. The person or entity submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addenda posted on DFCM’s web site at <http://dfcm.utah.gov>. Neither the DFCM nor A/E will be responsible for any other explanations or interpretations of the proposed documents. A/E shall be deemed to refer to the architect or engineer hired by DFCM as the A/E or Consultant for the Project.

**6. Addenda**

Addenda will be posted on DFCM’s web site at <http://dfcm.utah.gov>. Contractors are responsible for obtaining information contained in each addendum from the web site. Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda may result in disqualification from bidding.

**7. Award of Contract**

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of the State of Utah to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc.

**8. DFCM Contractor Performance Rating**

As a contractor completes each DFCM project, DFCM, the architect/engineer and the using agency will evaluate project performance based on the enclosed “DFCM Contractor Performance Rating” form. The ratings issued on this project will not affect this project but may affect the award on future projects.

**9. Licensure**

The Contractor shall comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah.

**10. Permits**

In concurrence with the requirements for permitting in the General Conditions, it is the responsibility of the Contractor to obtain the fugitive dust plan requirements from the Utah Division of Air Quality and the SWPPP requirements from the Utah Department of Environmental Quality and submit the completed forms and pay any permit fee that may be required for this specific project. Failure to obtain the required permit may result in work stoppage and/or fines from the regulating authority that will be the sole responsibility of the Contractor. Any delay to the project as a result of any such failure to obtain the permit or noncompliance with the permit shall not be eligible for any extension in the Contract Time.

**11. Right to Reject Bids**

DFCM reserves the right to reject any or all Bids.

**12. Time is of the Essence**

Time is of the essence in regard to all the requirements of the Contract Documents.

**13. Withdrawal of Bids**

Bids may be withdrawn on written request received from bidder prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

**14. Product Approvals**

Where reference is made to one or more proprietary products in the Contract Documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the Contract Documents, the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the drawings and specifications and are compatible with the intent and purpose of

the design, subject to the written approval of the A/E. Such written approval must occur prior to the deadline established for the last scheduled addenda to be issued. The A/E's written approval will be in an issued addendum. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the A/E.

**15. Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors**

Contractors shall respond promptly to any inquiry in writing by DFCM to any concern of financial responsibility of the contractor, subcontractor or sub-subcontractor.

**16. Debarment**

By submitting a bid, the Contractor certifies that neither it nor its principals, including project and site managers, have been, or are under consideration for, debarment or suspension, or any action that would exclude such from participation in a construction contract by any governmental department or agency. If the Contractor cannot certify this statement, attach to the bid a detailed written explanation which must be reviewed and approved by DFCM as part of the requirements for award of the Project.

## BID BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

### KNOW ALL PERSONS BY THESE PRESENTS:

That \_\_\_\_\_ hereinafter referred to as the "Principal," and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ and authorized to transact business in this State and U. S. Department of the Treasury Listed, (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the STATE OF UTAH, hereinafter referred to as the "Obligee," in the amount of \$ \_\_\_\_\_ (5% of the accompanying bid), being the sum of this Bond to which payment the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH** that whereas the Principal has submitted to Obligee the accompanying bid incorporated by reference herein, dated as shown, to enter into a contract in writing for the \_\_\_\_\_ Project.

**NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH**, that if the said principal does not execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the principal, then the sum of the amount stated above will be forfeited to the State of Utah as liquidated damages and not as a penalty; if the said principal shall execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the Principal, then this obligation shall be null and void. It is expressly understood and agreed that the liability of the Surety for any and all defaults of the Principal hereunder shall be the full penal sum of this Bond. The Surety, for value received, hereby stipulates and agrees that obligations of the Surety under this Bond shall be for a term of sixty (60) days from actual date of the bid opening.

**PROVIDED, HOWEVER**, that this Bond is executed pursuant to provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to same extent as if it were copied at length herein.

**IN WITNESS WHEREOF**, the above bounden parties have executed this instrument under their several seals on the date indicated below, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**DATED** this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**Principal's name and address (if other than a corporation):**

\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**Principal's name and address (if a corporation):**

\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_  
(Affix Corporate Seal)

**Surety's name and address:**

\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_  
Attorney-in-Fact (Affix Corporate Seal)

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, personally appeared before me \_\_\_\_\_, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

My Commission Expires: \_\_\_\_\_

Resides at: \_\_\_\_\_

Agency: \_\_\_\_\_  
Agent: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

NOTARY PUBLIC

Approved As To Form: May 25, 2005  
By Alan S. Bachman, Asst Attorney General

**Division of Facilities Construction and****INSTRUCTIONS AND SUBCONTRACTORS LIST FORM**

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of **ALL** first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, based on the following:

**DOLLAR AMOUNTS FOR LISTING**

**PROJECTS UNDER \$500,000: ALL FIRST-TIER SUBS \$20,000 OR OVER MUST BE LISTED**  
**PROJECTS \$500,000 OR MORE: ALL FIRST-TIER SUBS \$35,000 OR OVER MUST BE LISTED**

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- If there are no subcontractors for the job that are required to be reported by State law (either because there are no subcontractors that will be used on the project or because there are no first-tier subcontractors over the dollar amounts referred to above), then you do not need to submit a sublist. If you do not submit a sublist, it will be deemed to be a representation by you that there are no subcontractors on the job that are required to be reported under State law. At any time, DFCM reserves the right to inquire, for security purposes, as to the identification of the subcontractors at any tier that will be on the worksite.

**LICENSURE:**

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide only materials, equipment, or supplies to a contractor or subcontractor.

**'SPECIAL EXCEPTION':**

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A. Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

**GROUND FOR DISQUALIFICATION:**

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for

**INSTRUCTIONS AND SUBCONTRACTORS LIST FORM**  
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such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

**CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:**

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

**EXAMPLE:**

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, “SELF” OR “SPECIAL EXCEPTION”	SUBCONTRACTOR BID AMOUNT	CONTRACTOR LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	“Self” *	\$300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	\$298,000.00	987654321000
MECHANICAL	“Special Exception” (attach documentation)	Fixed at: \$350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

\* Bidders may list “self”, but it is not required.

**PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS  
SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.**

**SUBCONTRACTORS LIST**

FAX TO 801-538-3677

PROJECT TITLE: \_\_\_\_\_

Caution: You must read and comply fully with instructions.

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #

We certify that:

1. This list includes all subcontractors as required by the instructions, including those related to the base bid as well as any alternates.
2. We have listed "Self" or "Special Exception" in accordance with the instructions.
3. All subcontractors are appropriately licensed as required by State law.

FIRM: \_\_\_\_\_

DATE: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

**NOTICE:** FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR OWNER'S REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY OWNER. ATTACH A SECOND PAGE IF NECESSARY.

## CONTRACTOR'S AGREEMENT

FOR:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THIS CONTRACTOR'S AGREEMENT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as "DFCM", and \_\_\_\_\_, incorporated in the State of \_\_\_\_\_ and authorized to do business in the State of Utah, hereinafter referred to as "Contractor", whose address is \_\_\_\_\_.

WITNESSETH: WHEREAS, DFCM intends to have Work performed at \_\_\_\_\_.

WHEREAS, Contractor agrees to perform the Work for the sum stated herein.

NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:

**ARTICLE 1. SCOPE OF WORK.** The Work to be performed shall be in accordance with the Contract Documents prepared by \_\_\_\_\_ and entitled "\_\_\_\_\_"

The DFCM General Conditions ("General Conditions") dated May 25, 2005 and Supplemental General Conditions dated July 15, 2008 ("also referred to as General Conditions") on file at the office of DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contractor's Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions.

The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the Contractor to the DFCM hereunder is that of an independent Contractor.

**ARTICLE 2. CONTRACT SUM.** The DFCM agrees to pay and the Contractor agrees to accept in full performance of this Contractor's Agreement, the sum of \_\_\_\_\_ DOLLARS AND NO CENTS (\$\_\_\_\_\_.00), which is the base bid, and which sum also includes the cost of a 100% Performance Bond and a 100%



CONTRACTOR'S AGREEMENT  
PAGE NO. 2

Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

**ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY.** The Work shall be Substantially Complete by \_\_\_\_\_. Contractor agrees to pay liquidated damages in the amount of \$\_\_\_\_\_ per day for each day after expiration of the Contract Time until the Contractor achieves Substantial Completion in accordance with the Contract Documents, if Contractor's delay makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the time of execution of this Contractor's Agreement; (c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

**ARTICLE 4. CONTRACT DOCUMENTS.** The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Invitation to Bid, Instructions to Bidders/ Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

**ARTICLE 5. PAYMENT.** The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the Contractor requests payment and agrees to

safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

**ARTICLE 6. INDEBTEDNESS.** Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

**ARTICLE 7. ADDITIONAL WORK.** It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

**ARTICLE 8. INSPECTIONS.** The Work shall be inspected for acceptance in accordance with the General Conditions.

**ARTICLE 9. DISPUTES.** Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

**ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT.** This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

**ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE THEREOF.** The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

**ARTICLE 12. INDEMNIFICATION.** The Contractor shall comply with the indemnification provisions of the General Conditions.

**ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT.** The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor's Agreement. The Contractor shall not assign this Contractor's Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor's Agreement, without prior written consent of the DFCM.

**ARTICLE 14. RELATIONSHIP OF THE PARTIES.** The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

**ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT.** Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

**ARTICLE 16. ATTORNEY FEES AND COSTS.** Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

CONTRACTOR'S AGREEMENT  
PAGE NO. 5

**IN WITNESS WHEREOF**, the parties hereto have executed this Contractor's Agreement on the day and year stated hereinabove.

**CONTRACTOR:** \_\_\_\_\_

\_\_\_\_\_  
Signature Date

Title: \_\_\_\_\_

State of \_\_\_\_\_)  
\_\_\_\_\_)  
County of \_\_\_\_\_)

\_\_\_\_\_  
Please type/print name clearly

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me, \_\_\_\_\_, whose identity is personally known to me (or proved to me on the basis of satisfactory evidence) and who by me duly sworn (or affirmed), did say that he (she) is the \_\_\_\_\_ (title or office) of the firm and that said document was signed by him (her) in behalf of said firm.

(SEAL)

\_\_\_\_\_  
**Notary Public**

My Commission Expires \_\_\_\_\_

APPROVED AS TO AVAILABILITY  
OF FUNDS:

\_\_\_\_\_  
David D. Williams, Jr. Date  
DFCM Administrative Services Director

**DIVISION OF FACILITIES  
CONSTRUCTION AND MANAGEMENT**

\_\_\_\_\_  
Lynn A. Hinrichs Date  
Assistant Director Construction Management

APPROVED AS TO FORM:  
ATTORNEY GENERAL  
July 15, 2008  
By: Alan S. Bachman  
Asst Attorney General

APPROVED FOR EXPENDITURE:  
\_\_\_\_\_  
Division of Finance Date

# PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That \_\_\_\_\_ hereinafter referred to as the "Principal" and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ and authorized to transact business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah, hereinafter referred to as the "Obligee," in the amount of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain written Contract with the Obligee, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, to construct \_\_\_\_\_ in the County of \_\_\_\_\_, State of Utah, Project No. \_\_\_\_\_, for the approximate sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), which Contract is hereby incorporated by reference herein.

**NOW, THEREFORE**, the condition of this obligation is such that if the said Principal shall faithfully perform the Contract in accordance with the Contract Documents including, but not limited to, the Plans, Specifications and conditions thereof, the one year performance warranty, and the terms of the Contract as said Contract may be subject to Modifications or changes, then this obligation shall be void; otherwise it shall remain in full force and effect.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the state named herein or the heirs, executors, administrators or successors of the Owner.

The parties agree that the dispute provisions provided in the Contract Documents apply and shall constitute the sole dispute procedures of the parties.

**PROVIDED, HOWEVER**, that this Bond is executed pursuant to the Provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

**IN WITNESS WHEREOF**, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

## WITNESS OR ATTESTATION:

## PRINCIPAL:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

(Seal)

Title: \_\_\_\_\_

## WITNESS OR ATTESTATION:

## SURETY:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

Attorney-in-Fact (Seal)

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney in-fact of the above-named Surety Company and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My commission expires: \_\_\_\_\_

Resides at: \_\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC

Agency: \_\_\_\_\_  
Agent: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

Approved As To Form: May 25, 2005  
By Alan S. Bachman, Asst Attorney General

# PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

## KNOW ALL PERSONS BY THESE PRESENTS:

That \_\_\_\_\_ hereinafter referred to as the "Principal," and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_ authorized to do business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); with its principal office in the City of \_\_\_\_\_, hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah hereinafter referred to as the "Obligee," in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain written Contract with the Obligee, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, to construct \_\_\_\_\_ in the County of \_\_\_\_\_, State of Utah, Project No. \_\_\_\_\_ for the approximate sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), which contract is hereby incorporated by reference herein.

**NOW, THEREFORE**, the condition of this obligation is such that if the said Principal shall pay all claimants supplying labor or materials to Principal or Principal's Subcontractors in compliance with the provisions of Title 63, Chapter 56, of Utah Code Annotated, 1953, as amended, and in the prosecution of the Work provided for in said Contract, then, this obligation shall be void; otherwise it shall remain in full force and effect.

That said Surety to this Bond, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or to the Work to be performed thereunder, or the specifications or drawings accompanying same shall in any way affect its obligation on this Bond, and does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to the Work or to the specifications or drawings and agrees that they shall become part of the Contract Documents.

**PROVIDED, HOWEVER**, that this Bond is executed pursuant to the provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

**IN WITNESS WHEREOF**, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

## WITNESS OR ATTESTATION:

## PRINCIPAL:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

(Seal)

Title: \_\_\_\_\_

## WITNESS OR ATTESTATION:

## SURETY:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

Attorney-in-Fact (Seal)

STATE OF \_\_\_\_\_ )  
 ) ss.

COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My commission expires: \_\_\_\_\_

Resides at: \_\_\_\_\_

NOTARY PUBLIC

**Agency:** \_\_\_\_\_  
**Agent:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

Approved As To Form: May 25, 2005  
By Alan S. Bachman, Asst Attorney General

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

PROJECT \_\_\_\_\_ PROJECT NO: \_\_\_\_\_

AGENCY/INSTITUTION \_\_\_\_\_

AREA ACCEPTED \_\_\_\_\_

The Work performed under the subject Contract has been reviewed on this date and found to be Substantially Completed as defined in the General Conditions; including that the construction is sufficiently completed in accordance with the Contract Documents, as modified by any change orders agreed to by the parties, so that the State of Utah can occupy the Project or specified area of the Project for the use for which it is intended.

The DFCM - (Owner) accepts the Project or specified area of the Project as Substantially Complete and will assume full possession of the Project or specified area of the Project at \_\_\_\_\_ (time) on \_\_\_\_\_ (date).

The DFCM accepts the Project for occupancy and agrees to assume full responsibility for maintenance and operation, including utilities and insurance, of the Project subject to the itemized responsibilities and/or exceptions noted below:

The Owner acknowledges receipt of the following closeout and transition materials:

As-built Drawings

O &amp; M Manuals

Warranty Documents

Completion of Training  
Requirements

A list of items to be completed or corrected (Punch List) is attached hereto. The failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents, including authorized changes thereof. The amount of \_\_\_\_\_ (Twice the value of the punch list work) shall be retained to assure the completion of the punch list work.

The Contractor shall complete or correct the Work on the list of (Punch List) items appended hereto within \_\_\_\_\_ calendar days from the above date of issuance of this Certificate. The amount withheld pending completion of the list of items noted and agreed to shall be: \$ \_\_\_\_\_. If the list of items is not completed within the time allotted the Owner has the right to be compensated for the delays and/or complete the work with the help of independent contractor at the expense of the retained project funds. If the retained project funds are insufficient to cover the delay/completion damages, the Owner shall be promptly reimbursed for the balance of the funds needed to compensate the Owner.

\_\_\_\_\_  
CONTRACTOR (include name of firm) by: \_\_\_\_\_  
(Signature) DATE

\_\_\_\_\_  
A/E (include name of firm) by: \_\_\_\_\_  
(Signature) DATE

\_\_\_\_\_  
USING INSTITUTION OR AGENCY by: \_\_\_\_\_  
(Signature) DATE

\_\_\_\_\_  
DFCM (Owner) by: \_\_\_\_\_  
(Signature) DATE

**General Contractor Performance Rating Form**

Project Name:		DFCM Project#	
Contractor:  (ABC Construction, John Doe, 111-111-1111)	A/E:  (ABC Architects, Jane Doe, 222-222-2222)	Original Contract Amount:	Final Contract Amount:
DFCM Project Manager:		Contract Date:	
Completion Date:		Date of Rating:	

Rating Guideline	QUALITY OF PRODUCT OR SERVICES	COST CONTROL	TIMELINESS OF PERFORMANCE	BUSINESS RELATIONS
<b>5-Exceptional</b>	Contractor has demonstrated an exceptional performance level in any of the above four categories that justifies adding a point to the score. Contractor performance clearly exceeds the performance levels described as "Very Good"			
<b>4-Very Good</b>	Contractor is in compliance with contract requirements and/or delivers quality product/service.	Contractor is effective in managing costs and submits current, accurate, and complete billings	Contractor is effective in meeting milestones and delivery schedule	Response to inquiries, technical/service/administrative issues is effective
<b>3-Satisfactory</b>	Minor inefficiencies/errors have been identified	Contractor is usually effective in managing cost	Contractor is usually effective in meeting milestones and delivery schedules	Response to inquires technical/service/administrative issues is somewhat effective
<b>2-Marginal</b>	Major problems have been encountered	Contractor is having major difficulty managing cost effectively	Contractor is having major difficulty meeting milestones and delivery schedule	Response to inquiries, technical/service/administrative issues is marginally effective
<b>1-Unsatisfactory</b>	Contractor is not in compliance and is jeopardizing achievement of contract objectives	Contractor is unable to manage costs effectively	Contractor delays are jeopardizing performance of contract objectives	Response to inquiries, technical/service/administrative issues is not effective

<b>1. Rate Contractors quality of workmanship, management of sub contractor performance, project cleanliness, organization and safety requirement.</b>	<b>Score</b>
<u>Agency Comments:</u>	
<u>A &amp; E Comments:</u>	
<u>DFCM Project Manager Comments:</u>	



<b>2. Rate Contractor administration of project costs, change orders and financial management of the project budget.</b>	<b>Score</b>
<u>Agency Comments:</u>	
<u>A &amp; E Comments:</u>	
<u>DFCM Project Manager Comments:</u>	

<b>3. Rate Contractor's performance and adherence to Project Schedule, delay procedures and requirements of substantial completion, inspection and punch-list performance.</b>	<b>Score</b>
<u>Agency Comments:</u>	
<u>A &amp; E Comments:</u>	
<u>DFCM Project Manager Comments:</u>	

<b>4. Evaluate performance of contractor management team including project manager, engineer and superintendent also include in the rating team's ability to work well with owner, user agency and consultants.</b>	<b>Score</b>
<u>Agency Comments:</u>	
<u>A &amp; E Comments:</u>	
<u>DFCM Project Manager Comments:</u>	

5. Rate success of Contractor's management plan, completion of the plans mitigation of project risks and performance of value engineering concepts.	Score
<u>Agency Comments:</u>	
<u>A &amp; E Comments:</u>	
<u>DFCM Project Manager Comments:</u>	

Signed by:	Date:	Mean Score

**Additional Comments:**



**LERCH BATES**

*Building Insight*

## **HYDRAULIC ELEVATOR MODERNIZATION BID SPECIFICATION**

**SALT LAKE COMMUNITY COLLEGE  
ADVANCED TECHNOLOGY CENTER AND CONSTRUCTION TRADES BUILDING  
CONSTRUCTION TRADES BUILDING  
REDWOOD ROAD CAMPUS  
SALT LAKE CITY, UTAH**

**APRIL 14, 2008**

*Prepared For:*

**MR. BOB ANDERSON  
STATE OF UTAH DFCM HAZ-MAT MANAGER  
STATE OF UTAH OFFICE BUILDING No. 4110  
SALT LAKE CITY, UT 84114  
801 538-3624, FAX 801 538-3267**

*Prepared By:*

**V. QUENTIN BATES, JR., P.E.  
PRINCIPAL  
LERCH BATES INC.  
724 EAST 1220 NORTH  
OREM, UTAH 84057  
720.641.7445, FAX 801.226.4404**

**LBA Project No. 0100000448**

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SECTION 01010  
SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. Base Bid: Modernize one hydraulic passenger elevator and one hydraulic freight elevator.
- B. Provide all labor, engineering, tools, transportation, services, supervision, materials and equipment necessary for and incidental to satisfactory completion of required work as indicated in Contract Documents.
- C. Provide all required staging, hoisting and movement of new equipment, reused equipment, or removal of existing equipment.
- D. Applicable conditions of DFCM invitation to bid, instructions to bidders and other bid/construction requirements.
- E. Scope of Contract includes, but is not limited to, the following:
  - 1. Coordination, scheduling and management of work of component suppliers and subcontractors.
  - 2. Modernize or furnish and install equipment as specified utilizing existing hoistways and machine rooms.
  - 3. Specific item of required work which cannot be determined to be included in another contract is thereby determined to be included in this contract.
  - 4. Coordinating and assisting other Contractors or Owner's forces in completing work not included in the elevator modernization contract.

1.02 ELEVATOR CONTRACTOR'S USE OF PREMISES

- A. Confine operations at site to areas permitted by law, ordinances, permits, Contract Documents, and Owner's specific instructions.
- B. Do not unreasonably encumber site with materials or equipment. Staging area will be located as directed by Owner.
- C. Do not load structure with weight that will endanger structure. Coordinate with Owner.
- D. Assume full responsibility for protection and safekeeping of tools and products stored on or off premises.
- E. Move stored products which interfere with operation of buildings or the work of other trades.
- F. Obtain and pay for use of additional storage or work areas if needed.

1.03 CONCURRENT MODERNIZATION WORK AND BUILDING OPERATION

- A. This project is an elevator modernization in existing buildings which are open for student activity and public business which will continue to operate throughout all phases of required work. It is essential that Elevator Contractor give special attention and priority to all matters concerning project safety, protection from dust and loose materials, reduction of noise level, protection from water and air

infiltration into building, and maintenance of neat, sightly conditions in and around work areas inside and outside of building. Packaging, scrap materials and demolition debris shall be promptly removed from buildings and sites on a daily basis.

- B. At all times, Elevator Contractor shall provide clearly visible warning and directions signs, barricades, temporary lighting, overhead protection and hazard-free walking surfaces throughout public area. At all times, special attention must be given to building entrances, exits and proper safe exiting through work areas as required by law.

Elevator Contractor shall consult Owner and other Contractors to establish and maintain safe temporary routes including, but not limited to, proper barricades, walking surfaces, lighting, fire protection, exiting, warning and directional signs and general protection of persons from all hazards in accordance with OSHA Standards due wholly or partially to its operations.

#### 1.04 WORK SCHEDULE REQUIREMENTS

Elevator may be out of service for modernization during the following periods only:

- A. Redwood Road Campus: Start December 15<sup>th</sup>, 2008. Complete by Friday August 14<sup>th</sup>, 2009. Elevators may be modernized at the same time or staggered at Bidder's option.

END OF SECTION

SECTION 01030

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SECTION 01030

ALTERNATES

PART 1 GENERAL

1.01 SCOPE

- A. Provide material and labor required for complete execution of accepted alternates. Comply with all provisions of the Contract Documents.

1.02 ALTERNATES

- A. Alternate No. 1:

END OF SECTION

SECTION 01040

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PROJECT PROCEDURES

PART 1 GENERAL

1.01 APPLICABLE CODES

- A. Compliance with Regulatory Agencies: Comply with most stringent applicable provisions of following Codes, laws, and/or Authorities, including revisions and changes being enforced by the Governing Jurisdiction;
  - 1. Safety Code for Elevators and Escalators, ASME A17.1
  - 2. Guide for Inspection of Elevators, Escalators, and Moving Walks, ASME A17.2
  - 3. Elevator and Escalator Electrical Equipment, ASME A17.5
  - 4. National Electrical Code, NFPA 70
  - 5. Americans with Disabilities Act, ADA
  - 6. Local Fire Authority
  - 7. Requirements of IBC and all other Codes, Ordinances and Laws applicable within the governing jurisdiction
  - 8. Life Safety Code, NFPA 101.

1.02 STAGING AREA

The Owner will designate an equipment staging area in each building. Elevator Contractor shall restrict usage to area designated and shall notify Owner/ prior to storing of any large equipment which will impose heavy concentrated loading on floor area. Do not store such equipment until approval is received.

1.03 OCCUPANCY AND WORK BY OTHERS

- A. Elevator Contractor expressly affirms Owner's rights to let other contracts and employ other Contractors in connection with required work. Elevator Contractor will afford other Contractors and their workmen reasonable opportunity for introduction and storage of materials and equipment, for execution of their work and will properly connect and coordinate his work with theirs. Elevator Contractor will also incorporate comparable provisions in all its subcontracts.
- B. Elevator Contractor declares that other Contractors employed by Owner on basis of separate contracts may proceed at such times as necessary to install items of work required by Owner.
- C. Elevator Contractor declares that it will cooperate with Owner's work force and other Contractors employed by Owner and, in addition to other coordination and expediting efforts, will coordinate their work by written notices regarding necessity of such work to be done on or before certain dates.
- D. Elevator Contractor declares that it is responsible for review, stamped and signed approval of all shop drawings for required work.
- E. Elevator Contractor hereby declares that content of foregoing paragraphs, and influence they may have on project:
  - 1. Shall not cause a change in stipulated Contract Sum
  - 2. Shall not cause a change in Construction Time Schedule

END OF SECTION

SECTION 01300

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SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 SUBMITTALS

- A. Within 30 calendar days after award of contract and before beginning equipment fabrication, submit shop drawings and required material samples for review. Allow 15 days for response to initial submittal.
  - 1. Scaled or Fully Dimensioned Layout: Plan of machine rooms indicating equipment arrangement and details of all new fixtures.
  - 2. Design Information: Indicate equipment lists, and design information on layouts.
  - 3. Power Confirmation Information: Verify existing and design for those conditions.
  - 4. Fixtures: Cuts, samples, or shop drawings.
  - 5. Finish Material: Submit 12" x 12" samples if requested, of fixtures, lights, graphics, Braille plates, and detail of mounting provisions.
  - 6. Design Information: Provide calculations verifying the following;
    - a. Adequacy of existing electrical provisions, if requested or required.
- B. Submittal review shall not be construed as an indication that submittal is correct or suitable, or that the work represented by submittal complies with the Contract Documents. Compliance with Contract Documents, Code requirements, dimensions, fit, and interface with other work is Elevator Contractor's responsibility.
- C. Acknowledge and/or respond to review comments within 14 calendar days of return. Promptly incorporate required changes due to inaccurate data or incomplete definition so that delivery and installation schedules are not affected. Identify and cloud drawing revisions, including Elevator Contractor elective revisions on each re-submittal. Elevator Contractor's revision response time is not justification for equipment delivery or installation delay.

1.02 FINAL CONTRACT DOCUMENTS

See Section 01700, Project Closeout.

END OF SECTION

SECTION 01600

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1.05 COLORS OF FACTORY-FINISHED EQUIPMENT ..... 2

1.06 MATERIALS AND FINISHES..... 2

SECTION 01600

MATERIAL AND HANDLING

PART 1 GENERAL

1.01 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistways and machine room areas. Verify that no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

1.02 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in Elevator Contractor's original, unopened protective packaging.
- B. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.
- C. Protect equipment and exposed finishes from damage and stains during transportation, erection, and construction.
- D. Allocate available site storage areas and coordinate their use with Owner and other Contractors.
- E. Provide suitable temporary weather-tight storage facilities for materials stored in the open.

1.03 INSTALLATION REQUIREMENTS

- A. Install all equipment in accordance with Elevator Contractor's instructions, referenced Codes, specification and approved submittals.
- B. Install machine room equipment with clearances in accordance with referenced Codes and specification.
- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
  - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
  - 2. Machine room equipment, hoistway equipment including guide rails, guide rail brackets, and pit equipment.
  - 3. Neatly touch up damaged retained components with factory-painted surfaces with original paint color. Protect machine-finish surfaces against corrosion.

1.04 MANUFACTURER'S NAMEPLATES

- A. Manufacturer's name plates and other identifying markings may be affixed on surfaces exposed to public view. Also apply Underwriter's Laboratories and code required labels.
- B. Each major component of mechanical and electrical equipment shall have identification plate with the Manufacturer's name, address, model number rating and any other information required by Governing Codes.

1.05 COLORS OF FACTORY-FINISHED EQUIPMENT

- A. All colors will be selected from the Manufacturer's standard range unless custom colors are specified herein.
- B. Submit samples of all standard colors available and/or specified custom colors for review and approval. See Section 01300, Submittals
- C. Submit samples of all specified architectural metals specified for review and approval. See Section 01300, Submittals.

1.06 MATERIALS AND FINISHES

- A. Steel:
  - 1. Sheet Steel (Furniture Steel for Exposed Work): Stretcher-leveled, cold-rolled, commercial quality carbon steel, complying with ASTM A366, matte finish.
  - 2. Sheet Steel (for Unexposed Work): Hot-rolled, commercial quality carbon steel, pickled and oiled, complying with ASTM A568/A568M-03.
  - 3. Structural Steel Shapes and Plates: ASTM A36.
- B. Stainless Steel: Type 304 or 316 complying with ASTM A240, with standard tempers and hardness required for fabrication, strength and durability. Apply mechanical finish on fabricated work in the locations shown or specified, (Federal Standard and NAAMM nomenclature). Protect with adhesive paper covering.
  - 1. Satin: Directional polish finish (US 32D). Graining directions as shown or, if not shown, in longest dimension.
  - 2. Burnished: Non-directional, random abrasion pattern.
- C. Plastic Laminate: ASTM E84 Class A and NEMA LD3.1, Fire-Rated Grade (GP-50), Type 7, 0.050"  $\pm$  0.005" thick, color and texture as follows;
  - 1. Exposed Surfaces: Color and texture selected by Architect.
  - 2. Concealed Surfaces: Elevator Contractor's standard color and finish.
- D. Fire-Retardant Treated Particle Board Panels: Minimum 3/4" thick backup for natural finished wood and plastic laminate veneered panels, edged and faced as shown, provided with suitable anti-warp backing; meet ASTM E84 Class "I" rating with a flame-spread rating of 25 or less, registered with Local Authorities for elevator finish materials.
- E. Paint: Clean exposed metal parts and assemblies of oil, grease, scale, and other foreign matter and factory paint one shop coat of standard rust-resistant primer. After erection, provide one finish coat of industrial enamel paint. Galvanized metal need not be painted.
- F. Prime Finish: Clean all metal surfaces receiving a baked enamel paint finish of oil, grease, and scale. Apply one coat of rust-resistant primer followed by a filler coat over uneven surfaces. Sand smooth and apply final coat of primer.
- G. Baked Enamel Finish: Prime finish per above. Unless specified "prime finish" only, apply and bake three (3) additional coats of enamel in the selected solid color.
- H. Entrance Support Equipment within Hoistway: Include strut angles, headers, sill support angles, fascia, hanger covers, etc. Clean, remove and or check for corrosive activity. Replace components that exhibit severe deterioration. Tighten all fastenings.

END OF SECTION



SECTION 01700

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SECTION 01700

FINAL CONTRACT COMPLIANCE REVIEW

PART 1 GENERAL

1.01 FINAL CLEANING

- A. See Owner's General Conditions, for contractual requirements governing site cleaning. As a minimum:
  - 1. Elevator hoistway and all equipment therein shall be cleaned and left free of rust, filings, welding slag, rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt and dust. Include walls, building beams and sill ledges.
  - 2. Care shall be taken by workpersons not to mark, soil, or otherwise deface existing or new surfaces. Clean and restore such surfaces to their original condition.
  - 3. Clean down surfaces and areas which require final painting and finishing work. Cleaning includes removal of rubbish, broom cleaning of floors, removal of any loose plaster or mortar, dust and other extraneous materials from finish surfaces, and surfaces that will remain visible after the work is complete.

1.02 CONSULTANT'S FINAL OBSERVATION AND REVIEW REQUIREMENTS

- A. Review procedure shall apply to the individual elevator being modernized.
- B. Elevator Contractor shall perform review and evaluation of all aspects of its work prior to requesting Consultant's substantial completion review. Work shall be considered ready for Consultant's final contract compliance review when copies of Elevator Contractor's test and review sheets are available for Consultant's review and all elements of work or a designated portion thereof are in place and elevator is deemed ready for service as intended.
- C. Furnish labor, materials, and equipment necessary for Consultant's review. Notify Consultant five (5) working days in advance when ready for final review of elevator.
- D. Consultant's written list of observed deficiencies of materials, equipment and operating systems will be submitted to Elevator Contractor for corrective action. Consultant's review shall include as a minimum:
  - 1. Workmanship and equipment compliance with Contract Documents.
  - 2. Contract speed, capacity, floor-to-floor, and door performance comply with Contract Documents.
  - 3. Performance of following is satisfactory:
    - a. Starting, accelerating, running
    - b. Decelerating, stopping zone
    - c. Door operation and closing force
    - d. Equipment noise levels
    - e. Signal fixture utility
    - f. Overall ride quality
    - g. Performance of door control devices
  - 4. Test Results: In all test conditions, obtain specified contract speed, performance times, stopping zone without re-leveling, and ride quality to satisfaction of Owner and Consultant. Tests shall be conducted under both no load and full load condition if necessary to validate compliance.
- E. Performance Guarantee: Should Consultant's review identify defects, poor workmanship, variance or noncompliance with requirements of specified Codes and/or ordinances, or variance or noncompliance with the requirements of Contract Documents, Elevator Contractor shall complete corrective work in an expedient manner to satisfaction of Owner and Consultant at no cost as follows;

1. Replace equipment that does not meet Code or Contract Document requirements.
  2. Perform work and furnish labor, materials and equipment necessary to meet specified operation and performance.
  3. Perform retesting required by Governing Code Authority, Owner and Consultant at no cost to Owner.
- F. A follow-up final contract compliance review shall be performed by Consultant after notification by Elevator Contractor that all deficiencies have been corrected. Provide Consultant with copies of the initial deficiency report marked to indicate items which Elevator Contractor considers complete.

### 1.03 OWNER'S INFORMATION

- A. Non-Proprietary Equipment Design: Provide three sets of neatly bound written information necessary for proper maintenance and adjustment for equipment of within 30 days following final acceptance. Final retention will be withheld until data is received by Owner and reviewed by Consultant. Include the following as minimums;
1. Straight-line wiring diagrams of "as-installed" elevator circuits, with index of location and function of components. Provide one set reproducible master. Mount one set wiring diagrams on panels, racked, or similarly protected, in elevator machine room. Provide remaining set rolled and in a protective drawing tube. Maintain all drawing sets with addition of all subsequent changes. These diagrams and drawings are Owner's property. A legend sheet shall be furnished with each set of diagrams and drawings to provide the following information;
    - a. Name and symbol of each relay, switch, or other apparatus.
    - b. Location on drawings, drawing sheet number and area, and location of all contacts.
    - c. Location of apparatus, whether on controller or on car.
  2. Printed instructions explaining all operating and signaling features at landings, in cars and in machine rooms.
  3. Complete software documentation for all installed equipment.
  4. Lubrication instructions, including recommended grade of lubricants.
  5. Parts catalogs listing all replaceable parts including Elevator Contractor's identifying numbers and ordering instructions.
  6. Four sets of keys for all switches and control features properly tagged and marked.
  7. Diagnostic test devices together with all supporting information necessary for adjustment, diagnosis and troubleshooting of elevator system, and performance of routine safety tests. Include adjustment manuals which include explanation of test device use and interpretation of screen data.
  8. Neatly bound maintenance and adjustment instructions explaining areas to be addressed, methods and procedures to be used, and specified tolerances to be maintained for all equipment.
  9. The elevator installation shall be a design that can be maintained by any licensed elevator maintenance company employing journeymen mechanics, without the need to purchase or lease additional diagnostic devices, special tools, or instructions from the original equipment Elevator Contractor.
    - a. Provide on site capability to diagnose faults to the level of individual circuit boards and individual discreet components for the solid state elevator controller.
    - b. Provide a separate, detachable device as part of this installation if the equipment for fault diagnosis is not completely self-contained within the controller. Such device shall be in possession of and become property of the Owner. With a vision screen with maximum dimension of 9".
    - c. Installed equipment not meeting this requirement shall be removed and replaced with conforming equipment at no cost to the Owner.
  10. Provide upgrades and/or revisions of software during the progress of the work, warranty period and the term of the ongoing maintenance agreement between the Owner and Elevator Contractor.

- B. Acceptance of such records by Owner/Consultant shall not be a waiver of any Elevator Contractor deviation from Contract Documents or shop drawings or in any way relieve Elevator Contractor from his responsibility to perform work in accordance with Contract Documents.

END OF SECTION

SECTION 01800

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SECTION 01800

MAINTENANCE

PART 1 GENERAL

1.01 MAINTENANCE GENERAL

Provide all maintenance in accordance with the contract form included in Section 14325.

1.02 INTERIM MAINTENANCE

- A. Provide preventive maintenance and regular time call backs commencing as agreed upon with State as soon after notification of award as practical. Include in modernization cost quotation.
- B. Use competent personnel, acceptable to the Owner, employed and supervised by Elevator Contractor.

1.03 WARRANTY MAINTENANCE

- A. Quote monthly cost for twelve (12) month warranty maintenance commencing upon final acceptance of the modernized elevators. Submit quote based upon terms and conditions of the Owner's Preventive Maintenance Agreement included with these specifications.
- B. Use competent personnel, acceptable to the Owner, employed and supervised by Elevator Contractor.

END OF SECTION

SECTION 01900

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SECTION 01900

RELATED WORK BY ELEVATOR CONTRACTOR

PART 1 GENERAL

1.01 RELATED WORK

- A. Hoistway and Pit
  - 1. Cutting and patching hoistway walls as required.
  - 2. Extend pit access ladder to meet Code.
- B. Machine Room
  - 1. Paint floor.
- C. Electrical Service, Conductors and Devices
  - 1. Suitable machine room lighting to suit new equipment location (Use "T-8" type fluorescent fixtures).
  - 2. GFCI convenience outlets in pit, on car and in machine room.
  - 3. Main line power disconnecting means with shunt trip capability with associated heat sensor.
  - 4. Single phase, individual elevator power feeders and lockable disconnecting means for car lighting, fan, etc., in elevator machine room.
  - 5. Reconnect and test all existing smoke, heat and security sensors associated with elevator operation including connection with and operation of building life safety panel(s).
  - 6. Pit fluorescent lighting and switch.
  - 7. Hoistway smoke sensor if required.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION



SECTION 14250

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SECTION 14250

HYDRAULIC ELEVATOR MODERNIZATION

PART 1 GENERAL

1.01 WORK INCLUDED

- A. One hydraulic passenger elevator and one hydraulic freight elevator with microprocessor based, operation and motion control systems with field diagnostic capability.
- B. All engineering, equipment, labor, and permits required to satisfactorily complete elevator modernization required by Contract Documents.
- C. Preventive maintenance as described in this Section and Section 14325.
- D. Cartage and Hoisting: All required staging, hoisting and movement to, on and from the site including new equipment, reused equipment, or dismantling and removal of existing equipment.
- E. Unless specifically identified as "Reuse," "Retain," or "Refurbish," provide new equipment.
- F. Lobby barricades as required.

1.02 RELATED WORK PROVIDED BY ELEVATOR CONTRACTOR

See Section 01900, Related Work

1.03 DEFINITIONS

- A. Terms used are defined in the edition of the Safety Code for Elevators and Escalators, ASME A17.1 enforced by the local jurisdiction.
- B. Reference to a device or a part of the equipment applies to the number of devices or parts required to complete the installation.

1.04 QUALITY ASSURANCE

- A. Approved Providers: Alternate Providers must receive approval of the Owner or Consultant at least 14 calendar days prior to bid date.
  - 1. Hydraulic Elevator: CEMCOLift Elevator Systems, KONE, Minnesota Elevator Inc., Otis, Schindler, ThyssenKrupp.
- B. Compliance with Regulatory Agencies: See Section 01040, Project Procedures.
- C. Warranty:
  - 1. Material and workmanship of installation shall comply in every respect with Contract Documents. Correct defective material or workmanship which develops within one (1) year from date of final acceptance of all work to satisfaction of the Owner and Consultant at no additional cost, unless due to ordinary wear and tear, or improper use or care by performing maintenance as specified..
  - 2. Defective is defined to include, but not limited to; operation or control system failures, car performance below required minimum, excessive wear, unusual deterioration or aging of materials or finishes, unsafe conditions, the need for excessive maintenance, abnormal noise or vibration, and similar unsatisfactory conditions.

3. Retained Equipment: All retained components, parts, and materials shall be cleaned, checked, modified, repaired or replaced, so each component and its parts are in like new operating condition. Retained equipment must be compatible for integration with new systems. All retained equipment shall be covered under the warranty provisions, of Article 1.04, D., 1. & 2. of this item. No prorations of equipment or parts shall be allowed on preventive maintenance contract.
4. Make modifications, requirements, adjustments and improvements to meet performance requirements of Sections 01700 and 14250.

#### 1.05 DOCUMENT AND SITE VERIFICATION

In order to discover and resolve conflicts or lack of definition which might create problems, Elevator Contractor must review Contract Documents and site conditions for compatibility with its product prior to submittal of quotation. Review existing structure, electrical and mechanical provisions for compatibility with Elevator Contractor's products. Owner will not pay for change to structural, mechanical, electrical, or other systems required to accommodate Elevator Contractor's equipment.

#### 1.06 SUBMITTALS

See Section 01300, Submittals, and Section 01700, Final Contract Compliance Review, Article 1.03.

#### 1.07 PERMIT, TEST AND INSPECTION

- A. Obtain and pay for permit, license, and inspection necessary to complete installation.
- B. Perform tests required by Governing Authority in accordance with procedure described in ASME A17.2 Guide for Inspection of Elevators, Escalators, and Moving Walks in the presence of Authorized Representative of governing authority.
- C. Supply personnel and equipment for test and final review by Consultant, as required in Section 01700.

#### 1.08 MAINTENANCE

- A. Interim: See Section 01800, Maintenance, Article 1.02, A.
- B. Warranty: See Section 01800, Maintenance, Article 1.03, A.

### PART 2 PRODUCTS

#### 2.01 SUMMARY

Unless specifically identified as "retain existing," provide new equipment.

- A. Redwood Road Campus – Construction Trades Building

	EXISTING EQUIPMENT	DISPOSITION
NUMBER:	ONE	RETAIN EXISTING
CAPACITY:	7500#	7500#

	EXISTING EQUIPMENT	DISPOSITION
CLASS LOADING:	FREIGHT, INDUSTRIAL TRUCK LOADING	RETAIN EXISTING
CONTRACT SPEED:	ABOUT 40 F.P.M.	ABOUT 40 F.P.M.
MACHINE:	MONTGOMERY HYDRAULIC TYPE	NEW HYDRAULIC POWER UNIT
MACHINE LOCATION:	ROOM NEAR HOISTWAY AT LOWEST FLOOR	RETAIN EXISTING
OPERATION:	SINGLE AUTOMATIC PUSHBUTTON	MICROPROCESSOR BASED AUTOMATIC PUSHBUTTON SYSTEM
MOTOR CONTROL:	SINGLE SPEED AC	SINGLE SPEED AC WITH ELECTRONIC SOFT START
MOTOR HORSEPOWER:	FIELD VERIFY	NOT MORE THAN EXISTING
POWER CHARACTERISTICS:	FIELD VERIFY	RETAIN EXISTING (VERIFY)
STOPS:	TWO	RETAIN EXISTING
OPENINGS:	TWO, FRONT	RETAIN EXISTING
FLOORS SERVED:	B AND 1	RETAIN EXISTING
TRAVEL:	FIELD VERIFY	RETAIN EXISTING
PLATFORM SIZE:	FIELD VERIFY	RETAIN EXISTING
MINIMUM CLEAR INSIDE CAR:	FIELD VERIFY (ABOUT 8'-0" WIDE X 11'-6" DEEP)	RETAIN EXISTING
ENTRANCE SIZE:	8'-0" WIDE X 8'-0" HIGH FIELD VERIFY	RETAIN EXISTING
ENTRANCE TYPE:	VERTICAL BI-PARTING	RETAIN EXISTING
DOOR OPERATION:	HARRIS PREBLE POWER GATE AND DOORS	RETAIN EXISTING
DOOR PROTECTION:	NONE	SCREEN TYPE DETECTOR ON CAR GATE
ELEVATOR TYPE:	DIRECT PLUNGER, HYDRAULIC	SAME

	EXISTING EQUIPMENT	DISPOSITION
GUIDE RAILS:	PLANED STEEL TEES	RETAIN EXISTING
BUFFERS:	SPRING	RETAIN EXISTING
CAR ENCLOSURE:	PAINTED STEEL	RETAIN EXISTING WITH NEW BUMPER RAILS
SIGNAL AND OPERATING FIXTURES:		
CAR OPERATING STATION:		NEW WITH LED ILLUMINATING CALL BUTTONS. PROVIDER'S STANDARD
HALL PUSHBUTTON STATIONS:	SURFACE MOUNTED INCLUDING "OPEN", "CLOSE", "CALL"	NEW FREIGHT TYPE; ILLUMINATING CALL BUTTON
CAR POSITION INDICATOR:	NONE	NONE
HALL POSITION INDICATOR:	NONE	NONE
IN CAR LANTERNS:	NONE	NONE
COMMUNICATION SYSTEM:	"HELP LINK" TYPE	RETAIN EXISTING IF SUITABLE FRAME CABINET OPENING
FIXTURE SUBMITTAL:		SUBMIT BROCHURE DEPICTING PROVIDER'S PROPOSED DESIGNS WITH BID
ADDITIONAL FEATURES –		CAR GUIDE SHOES (RETAIN EXISTING)
		CAR TOP INSPECTION STATION (NEW)
		FIREFIGHTERS' SERVICE, PHASE I AND II, INCLUDING ALTERNATE FLOOR RETURN (NEW)
		PLATFORM ISOLATION JACK TO PLATEN CONNECTION (RETAIN IF EXISTING)
		TAMPER RESISTANT FASTENERS FOR ALL EXPOSED FASTENINGS
		ONE YEAR WARRANTY MAINTENANCE WITH REGULAR HOUR CALL-BACK SERVICE (NEW)

EXISTING EQUIPMENT	DISPOSITION
	SEISMIC SAFETY VALVE
	SIGNAGE ENGRAVING FILLED WITH BLACK PAINT OR APPROVED ETCHING PROCESS
	WIRING DIAGRAMS, OPERATING INSTRUCTIONS, AND PARTS ORDERING INFORMATION
	SYSTEM DIAGNOSTIC MEANS AND INSTRUCTIONS

ALTERNATES – SEE SECTION 01030

B. Redwood Road Campus – Advanced Technology Center

	EXISTING EQUIPMENT	DISPOSITION
NUMBER:	ONE	RETAIN EXISTING
CAPACITY:	1500#	1500#
CLASS LOADING:	PASSENGER CLASS A	RETAIN EXISTING
CONTRACT SPEED:	100 F.P.M.	100 F.P.M.
MACHINE:	MONTGOMERY HYDRAULIC TYPE	NEW HYDRAULIC TYPE
MACHINE LOCATION:	NEAR HOISTWAY AT LOWEST FLOOR	RETAIN EXISTING
OPERATION:	TWO STOP	MICROPROCESSOR BASED TWO STOP COLLECTIVE
MOTOR CONTROL:	SINGLE SPEED AC	SINGLE SPEED AC WITH ELECTRONIC SOFT START
MOTOR HORSEPOWER:	FIELD VERIFY	NOT MORE THAN EXISTING
POWER CHARACTERISTICS:	FIELD VERIFY	RETAIN EXISTING (VERIFY)
STOPS:	TWO	RETAIN EXISTING
OPENINGS:	TWO INLINE	RETAIN EXISTING
FLOORS SERVED:	1 AND 2	RETAIN EXISTING

	EXISTING EQUIPMENT	DISPOSITION
TRAVEL:	FIELD VERIFY	RETAIN EXISTING
PLATFORM SIZE:	FIELD VERIFY	RETAIN EXISTING
MINIMUM CLEAR INSIDE CAR:	FIELD VERIFY	TO SUITE NEW CAR ENCLOSURE DESIGN IF MODIFIED
ENTRANCE SIZE:	2'-8" WIDE X 6'-2" HIGH FIELD VERIFY	RETAIN EXISTING
ENTRANCE TYPE:	SINGLE SPEED, SIDE OPENING	RETAIN EXISTING
DOOR OPERATION:	MAC	NEW HIGH SPEED, HEAVY-DUTY, MINIMUM OPENING SPEED 2-F.P.S. WITH CLOSED LOOP CONTROL
DOOR PROTECTION:	DUAL LIGHT RAYS AND SAFETY EDGE	NEW INFRARED, FULL SCREEN DEVICE
ELEVATOR TYPE:	DIRECT PLUNGER	RETAIN EXISTING
GUIDE RAILS:	PLANED STEEL TEES	RETAIN EXISTING
BUFFERS:	SPRING	RETAIN EXISTING
CAR ENCLOSURE:	PAINTED STEEL WITH LAMINATE FACED PANELS ON REAR WALL	REMOVE EXISTING. PROVIDE NEW AS SPECIFIED
SIGNAL AND OPERATING FIXTURES:		
CAR STATION:	"UP/DN", "OPEN", "ALARM" AND "STOP" CONTROLS	LED ILLUMINATION. PROVIDER'S STANDARD OR CUSTOM DESIGN AS SELECTED BY OWNER
HALL PUSHBUTTON STATIONS:	SURFACE MOUNTED – ADA TYPE	RETAIN EXISTING
CAR POSITION INDICATORS:	NONE	DIGITAL WITH DIRECTION ARROWS IN NEW CAR STATION
HALL POSITION INDICATOR:	NONE	AT FIRST FLOOR WITH DIGITAL POSITION INDICATOR AND DIRECTION ARROWS
IN CAR LANTERNS:	NONE	PROVIDE NEW

	EXISTING EQUIPMENT	DISPOSITION
COMMUNICATION SYSTEM:	"HELP LINE" TYPE	REUSE EXISTING IF SUITABLE
FIXTURE SUBMITTAL:		SUBMIT BROCHURE DEPICTING PROVIDER'S PROPOSED DESIGNS WITH BID
ADDITIONAL FEATURES –		CAR ROLLER SHOES (RETAIN EXISTING)
		CAR TOP INSPECTION STATION (NEW)
		FIREFIGHTERS' SERVICE, PHASE I AND II, INCLUDING ALTERNATE FLOOR RETURN (NEW)
		ACCESSIBILITY SIGNAGE (AS REQUIRED TO MEET ADA)
		PLATFORM ISOLATION JACK TO PLATEN CONNECTION (RETAIN EXISTING)
		INDEPENDENT SERVICE FEATURE (NEW)
		TAMPER RESISTANT FASTENERS FOR ALL FASTENINGS EXPOSED TO THE PUBLIC (NEW)
		ONE YEAR WARRANTY MAINTENANCE WITH REGULAR HOUR CALL-BACK SERVICE (NEW)
		SEISMIC SAFETY VALVE (NEW)
		SIGNAGE ENGRAVING FILLED WITH BLACK PAINT OR APPROVED ETCHING PROCESS
		WIRING DIAGRAMS, OPERATING INSTRUCTIONS, AND PARTS ORDERING INFORMATION
		SYSTEM DIAGNOSTIC MEANS AND INSTRUCTIONS

ALTERNATES – SEE SECTION 01030

## 2.02 CAR PERFORMANCE

A. Car Speed:  $\pm 10\%$  of contract speed under any loading condition.



- B. Car Capacity: Safely lower, stop and hold up to 125% of rated load.
- C. Car Stopping Zone:  $\pm 3/8$ " under any loading condition.
- D. Passenger Door Opening Time: 2.5 Seconds maximum from start of opening to fully open.
- E. Passenger Door Closing Time: 3.3 Seconds minimum from start of closing to fully closed:
- F. Passenger Car Floor-to-Floor Performance Time: 18.0 Seconds maximum from start of doors closing until doors are 3/4 open and car level and stopped at next successive floor under any loading condition or travel direction.

## 2.03 OPERATION

- A. Automatic Pushbutton (Freight Elevator): Operate car without attendant from pushbuttons in car and at each landing. When car is idle, automatically start car and dispatch it to appropriate floor when call is registered by pressing car or hall pushbutton.

Illuminate, "in use" lights in each hall pushbutton station when car is responding to registered car or hall call. Prevent registration of another call until trip is complete including time for passenger transfer and registration of car call if car is responding to a hall call. Extinguish "in use" light to indicate system is available to respond to next hall call.

- B. Two Stop Collective Microprocessor Based (Passenger Elevator): Operate car without attendant from pushbuttons in car and located at each landing. Dispatch car when the car or hall pushbutton for a landing is pressed. Retain calls registered when car is in transit, allow time for passenger transfer and then dispatch to another hall call.

Illuminate appropriate pushbutton to indicate call registration. Extinguish light when call is answered.

- C. Other Items:
  - 1. Low Oil Control: In the event oil level is insufficient for travel to the top floor, provide controls to return elevator to the main level and park until oil is added.
  - 2. Independent Service (Passenger Elevator): Provide controls for operation of each car from its pushbuttons only. Close doors by constant pressure on desired destination floor button or door close button. Open doors automatically upon arrival at selected floor.
- D. Firefighters' Service: Provide equipment and operation in accordance with Code requirements.
- E. Automatic Car Stopping Zone: Stop car within  $3/8$ " above or below the landing sill. Maintain stopping zone regardless of load in car, direction of travel, distance between landings, hoist rope slippage and/or stretch.
- F. Motion Control: AC type with unit valve suitable for operation specified and capable of providing smooth, comfortable car acceleration and retardation. Limit the difference in car speed between full load and no load to not more than  $\pm 10\%$  of the contract speed in each direction.
- G. Door Operation (Passenger Elevator): Automatically open doors when car arrives at main floor. At expiration of normal dwell time, close doors. Provide "heavy door/variable air pressure" feature for consistent specified door operation within appropriate speed and inertia limits. Reuse existing operation and control.
- H. Power Door Operation (Freight Elevator): Open door and gate automatically when car arrives at a floor. Control door and gate closing by using constant pressure buttons on car or at each floor.

Provide passenger sequence operation. Provide infra-red screen type gate reversing edge device on car gate and cushion edge.

- I. Standby Lighting and Alarm: Car mounted battery unit with solid-state charger to operate alarm bell and car emergency lighting. Battery to be rechargeable with minimum 5-year life expectancy. Include required transformer. Provide constant pressure test button in car operating panel.

## 2.04 MACHINE ROOM EQUIPMENT

- A. Arrange equipment in existing machine room enclosures.
- B. Pump Unit:
  1. Remove and dispose of existing oil and pump unit.
  2. Provide new unit consisting of positive displacement pump, induction motor, master-type control valves combining safety features, holding, direction, bypass, stopping, manual lowering functions, shut off valve, oil reservoir with protected vent opening, oil level gauge, outlet strainer, drip pan, muffler, all mounted on isolating pads. Enclose entire unit with removable sheet steel panels lined with sound-absorbing material. Provide SCR soft start with closed transition. Design unit for 80 upstarts/hour.
- C. Landing Systems: Solid-state, magnetic or optical type.
- D. Controller: UL/CSA labeled.
  1. Compartment: Securely mount all assemblies, power supplies, chassis switches, relays, etc., on a substantial, self-supporting steel frame. Completely enclose equipment with covers. Provide means to prevent overheating.
  2. Relay Design: Magnet operated with contacts of design and material to insure maximum conductivity, long life and reliable operation without overheating or excessive wear. Provide wiping action and means to prevent sticking due to fusion. Contacts carrying high inductive currents shall be provided with arc deflectors or suppressors.
  3. Microprocessor-Related Hardware
    - a. Provide built-in noise suppression devices which provide a high level of noise immunity on all solid-state hardware and devices.
    - b. Provide power supplies with noise suppression devices.
    - c. Isolate inputs from external devices (such as pushbuttons) with opto-isolation modules.
    - d. Design control circuits with one leg of power supply grounded.
    - e. Safety circuits shall not be affected by accidental grounding of any part of the system.
    - f. System shall automatically restart when power is restored.
    - g. System memory shall be retained in the event of power failure or disturbance.
    - h. Equipment shall be provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.
  4. Wiring: CSA labeled copper for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to studs or terminals.
  5. Permanently mark components (relays, fuses, PC boards, etc.) with symbols shown on wiring diagrams.
- E. Muffler: Provide in discharge oil line near pump unit. Design shall dampen and absorb pulsation and noise in the flow of hydraulic fluid.
- F. Piping and Oil: Provide exposed piping, connections and oil for the system. A minimum of two (2) sound isolation couplings shall be provided between the pump unit and oil line and the oil line and jack unit. Provide isolated pipe stands or hangers as required.

- G. Shutoff Valve: Manual valve in line adjacent to pump unit. Provide second valve in pit adjacent to jack unit.
- H. Noise/Vibration Isolation: All elevator equipment including their supports and fastenings to building, shall be mechanically and electrically isolated from the building structure and main line power feeders to minimize objectionable noise and vibration transmission to car, building structure, or adjacent occupied areas of building.

## 2.05 HOISTWAY EQUIPMENT

- A. Guide Rails: Retain main guide rails in place.
  - 1. Clean rails and brackets. Remove rust.
  - 2. Check all rail and bracket fastenings and tighten.
- B. Buffers, Car: Retain existing.
- C. Hydraulic Jack Assembly: Retain existing.
  - 1. Cylinder(s): Retain existing.
  - 2. Plunger(s): Retain existing. Isolate plunger from car frame. Existing isolation should be checked and replaced if deterioration or hardening is occurring.
- D. Extend steel pit access ladders per code if required. Locate pit stop switch and light switch to suit ladder location.
- E. Jack Support: Retain existing steel pit channels to support jack assembly and transmit loads to building structure.
- F. Overspeed Valve(s): Provide a pressure sensitive, mechanically-actuated seismic safety valve, conforming to ASME A17.1, Rule 3.19.4.7. Connect valve directly to jack assembly inlet.
- G. Terminal Stopping: Provide normal and final devices per code.
- H. Electrical Wiring and Wiring Connections:
  - 1. Conductors and Connections: Copper throughout with individual wires coded and connections on identified studs or terminal blocks. Use no splices or similar connections in wiring except at terminal blocks, control compartments, or junction boxes. Provide 10% spare conductors throughout. Run spare wires from car connection points to individual elevator controllers in the machine room. Provide two (2) pairs of spare shielded communication wires in addition to those required to connect specified items. Tag spares in machine room.
  - 2. Conduit: Painted or galvanized steel conduit, EMT or duct. Conduit size, 1/2" minimum. Flexible heavy-duty service cord may be used between fixed car wiring and car door switches for door protective devices.
  - 3. Traveling Cables: Flame and moisture-resistant outer cover. Prevent traveling cable from rubbing or chafing against hoistway or equipment within hoistway.
  - 4. Auxiliary Wiring: Connect fire alarm initiating devices, emergency two-way communication system, in car controller in machine room.
- I. Entrance Equipment (Passenger Elevator):
  - 1. If retained, refurbish/replace and adjust assemblies to ensure smooth and quiet mechanical open and close of doors.
  - 2. If new, meet the following requirements
    - a. Door Hangers: Two point hanger roller with neoprene roller surface and suspension with eccentric upthrust roller adjustment.

- b. Door Tracks: Bar or formed, cold-drawn removable steel tracks with smooth roller contact surface.
  - c. Door Interlocks: Operable without retiring cam.
  - d. Door Closers: Spring, spirator or jamb/strut mounted counterweight type. Design and adjust to insure smooth, quiet mechanical close of doors.
- J. Entrance Equipment (Freight Elevator):
  - 1. Door Guide Tracks: Continuous steel angles or formed steel tracks fastened to hoistway door jamb. Existing may be refurbished and reused if suitable.
  - 2. Door Guide Shoes: Machined iron shoes. Four shoes per door panel, with not less than 2-1/2" lateral contact per shoe. Existing may be reused if suitable.
  - 3. Door Interlocks: Provide new per Code.
  - 4. Hoistway Door Unlocking Device: Provide unlocking device with pull chain under hinged, lockable cover with stainless steel No. 4 finish at both floors.

## 2.06 HOISTWAY ENTRANCES – PASSENGER ELEVATOR

- A. Frames: Retain existing. Replace missing or non-conforming floor designation plates on entrance jambs.
- B. Door Panels: Retain existing. Inspect existing gibs and replace worn or damage.
- C. Sight Guards: Retain existing. Replace any damaged sight guards.
- D. Sills: Retain existing. Check and tighten all fastenings.
- E. Sill Supports: Retain existing. Check and tighten all fastenings.
- F. Fascia, Toe Guards and Hanger Covers: Retain existing. Provide as required where damaged or missing. Check and tighten all fastenings. Clean and touch-up paint.
- G. Struts and Headers: Retain existing. Check and tighten all fastenings.
- H. Finish of Frames and Doors: Retain existing.

## 2.07 HOISTWAY ENTRANCES – FREIGHT ELEVATOR

- A. Retain existing.
  - 1. Clean and paint.

## 2.08 CAR EQUIPMENT

- A. Frame: Retain Existing. Check and tighten all fastenings.
- B. Platform: Retain existing. Reinforce if required. Check and tighten all fastenings.
- C. Platform Apron: Retain existing. Check and tighten al fastenings. Replace damaged or missing sections.
- D. Guide Shoes: Retain existing. Check and tighten all fastenings. Replace worn rollers or inserts.
- E. Sills: Retain existing. Check and tighten all fastenings on passenger.
- F. Doors (Passenger): New with brushed stainless steel face and exposed edges.

- G. Door Hangers and Rollers (Passenger): Replace complete hanger.
- H. Door Track (Passenger): Bar or formed, cold-drawn removable steel track with smooth roller contact surface.
- I. Door Header (Passenger): Retain existing if suitable. If provided new, construct of minimum 12 gauge steel, shape to provide stiffening flanges.
- J. Door Electrical Contact: Prohibit car operation unless car door or gate is closed.
- K. Door Clutch (Passenger): Provide new heavy-duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth, quiet door operation. Design clutch so car doors can be closed, while hoistway doors remain open.
- L. Restricted Opening Device (Passenger): Restrict opening of car door(s) outside unlocking zone. Plunger type restrictors not acceptable. Existing may be reused, if suitable.
- M. Door Operator (Passenger): High speed, heavy-duty door operator capable of opening doors at no less than 2 f.p.s. Accomplish reversal in no more than 2-1/2" of door movement. Provide solid-state door control with closed loop circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current. Maintain consistent, smooth and quiet door operation at all floors, regardless of door weight or varying air pressure.

Acceptable closed-loop door operators:

- |    |              |                                  |
|----|--------------|----------------------------------|
| 1. | KONE         | Renova 2.0 or Renova 1.5         |
| 2. | Otis         | AT 400 or i Motion II (Optional) |
| 3. | Schindler    | QKS 15                           |
| 4. | ThyssenKrupp | LD                               |

- N. Door Control Device (Passenger):
1. Infrared Reopening Device: Black, fully enclosed device with full screen infrared matrix or multiple beams extending vertically along leading edge of each door panel to minimum height of 7'-0" above finished floor. Device shall prevent doors from closing and reverse doors at normal opening speed if beams are obstructed while doors are closing, except during nudging operation. In event of device failure, provide for automatic shutdown of car at floor level with doors open
    - a. Acceptable Infrared Reopening Device:
      - 1) Cegard/MAX-154 by CEDES
      - 2) Gatekeeper by Adams
      - 3) Lambda II by Otis
      - 4) Magic Edge by Tri-Tronics
      - 5) Microlite by ThyssenKrupp
      - 6) Microscan E by T.L. Jones
      - 7) Pana40 Plus by Janus
  2. Nudging Operation: After beams of door control device are obstructed for a predetermined time interval (minimum 20.0 - 25.0 seconds), warning signal shall sound and doors shall attempt to close with a maximum of 2.5 foot pounds kinetic energy. Manufacturer's standard operation, if different, is acceptable. Activation of the door open button shall override nudging operation and reopen doors.
  3. Interrupted Beam Time: When beams are interrupted during initial door opening, hold door open a minimum of 3.0 seconds.
  4. Differential Door Time: Provide separately adjustable timers to vary time that doors remain open after stopping in response to calls.
    - a. Car Call: Hold open time adjustable between 3.0 and 5.0 seconds.
    - b. Hall Call: Hold open time adjustable between 4.0 - to 6.0 and 8.0 seconds. Use hall call time when car responds to coincidental calls.
- O. Freight Doors and Gate Operation: Refurbish existing components of power doors and gate. Provide means to open doors and gate from inside of car in the event of power failure.
1. Closing speed:
    - a. Doors: Minimum of 0.8 f.p.s.; maximum of 1.0 f.p.s.
    - b. Gates: Minimum of 1.6 f.p.s.; maximum of 2.0 f.p.s.
  2. Car Gate: Refurbish existing gate components. Provide passenger sequence operation.
  3. Infrared Reopening Device: Black, full enclosed device with full screen infrared matrix or multiple beams extending vertically along edge of car gate guide track to a height of 7'-0" above finished floor. Obstruction of beams during gate closing shall cause immediate re-opening. System providing vertical array along lower edge of gate also acceptable.
- P. Car Operating Panel. Provide new as follows:
1. One car operating panel with faceplate, consisting of a metal box containing operating fixtures, mounted behind the car stationary front return panel. Faceplate shall be hinged and constructed of stainless steel, satin finish.
  2. Suitably identify floor buttons, alarm button, door open button, door close button and emergency push-to-call button with cast tactile symbols surface, recessed flush or rear mounted on passenger elevator. Configure plates per local building code accessibility standards including Braille. Locate operating controls no higher than 48" above the car floor; no lower than 35" for emergency push-to-call alarm button. Provide freight with provider's standard fixture.
  3. Provide minimum 3/4" diameter raised floor pushbuttons which illuminate to indicate call registration.
  4. Provide alarm button to ring bell located on car.. Illuminate button when actuated.
  5. Provide keyed stop switch on passenger elevator, manually open and closed type on freight. Connect both to sound alarm bell when in activated position. Mark device to indicate "run" and "stop" positions.

6. Provide "door open" button to stop and reopen doors or hold doors in open position on passenger and to initiate door opening on freight doors when standing closed.
  7. Provide "door close" button to activate door close cycle. Cycle shall not begin until normal door dwell time for a car or hall call has expired, except firefighters' operation, on passenger. On freight door close shall be constant pressure means to close doors and gate with passenger sequence.
  8. Provide firefighters' Phase II lockable compartment per Code.
  9. Include the following keyed controls in car station faceplate with function and operating positions identified by permanent signage or engraved legend:
    - a. Inspection switch.
    - b. Light switch.
    - c. Blower switch on passenger car only.
    - d. Independent service switch on passenger car only.
    - e. Constant pressure test switch for battery pack emergency lighting.
    - f. Switch to select either floor voice annunciation or floor passing tone on passenger elevator.
  10. Provide black paint filled (except as noted), engraved or approved etched signage as follows with approved size and font:
    - a. "No Smoking".
    - b. Car capacity in pounds.
- Q. Provide 120-volt, AC, GFCI protected electrical convenience outlet, in car base or front return.
- R. Car Top Control Station: Mount to provide safe access and utilization. Note limited overhead on passenger elevator.
- S. Work Light and Duplex Plug Receptacle: GFCI protected outlet at top of car. Include on/off switch and lamp guard.
- T. Communication System:
1. "Push to Call," two-way communication instrument in car with automatic dialing, tracking and recall features with shielded wiring to car controller in machine room. Provide dialer with automatic rollover capability with minimum two numbers.
    - a. "Push to Call" button or adjacent light jewel shall illuminate and flash when call is acknowledged. Button shall match car operating panel pushbutton design.
    - b. Provide "Push to Call" button tactile symbol, engraved signage, and Braille adjacent to button mounted integral with car front return panel.
  2. Install remote speaker(s) behind front return panel with drilled speaker pattern, and shielded wiring to machine room junction box.
  3. Existing may be reused if suitable. Provide metal trim around box on freight.
  4. Provide two-way communication between car and machine room if required.

## 2.09 CAR ENCLOSURE

- A. Passenger Elevator – Reuse existing with the following modifications:
1. New car door panel with brushed stainless steel face and exposed edges.
  2. Face entrance columns and head with brushed stainless steel.
  3. Provide minimum 1 ¼" diameter brushed stainless steel grab rail on each side of car, ends turned in.
- B. Freight Elevator:
1. Provide two (2) rows of nominal 2" x 12" oak or maple bumper rails on sides and rear of car. Locate bottom rail approximately 3" above floor and top rail about 36" above floor. Bolt rails through car walls with nuts recessed in exposed face of rail permitting removal and replacement if rails from inside of car. Secure bolts on car walls.

## 2.10 HALL CONTROL STATIONS

- A. Retain existing on passenger elevator in Advanced Technology Center. Add approved message and pictorial representation prohibiting use of elevator during fire or other emergency situation on a separate engraved, brushed stainless steel sign, designed to compliment hall pushbutton station cover. Provide new stations with brushed stainless steel faceplates sized to cover existing wall cutouts on freight elevator in Construction Trades Building. Include call pushbutton for each direction of travel which illuminates to indicate call registration on passenger elevator. Include "Door Open", "Door Close" and "Stop" buttons as well as illuminating call pushbutton in freight hall stations. Stations may be surface mounted type or flush.

## 2.11 SIGNALS (PASSENGER ELEVATOR)

- A. Car Direction Lantern: Provide new. Provide new chime or electronic sound and LED lamp illumination. Meet ADA operating requirements.
- B. Floor Passing Tone: Provide an audible tone of no less than 20 decibels and frequency of no higher than 1500 Hz to sound as the car stops at a floor serviced.
- C. Voice Announcing: Provide electronic device with easily reprogrammable message and female voice to announce car direction, floor, emergency exiting instructions, etc.
- D. Include keyed switch in car station to select tone or voice system.

## 2.12 SEISMIC OPERATIONS AND EQUIPMENT

Provide design, components and operation per governing authority.

# PART 3 EXECUTION

## 3.01 SITE CONDITION INSPECTION

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify that no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.

## 3.02 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver material in Provider's original, unopened protective packaging.
- B. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.
- C. Protect equipment and exposed finishes from damage and stains during transportation, erection, and construction.

## 3.03 INSTALLATION

- A. Install all equipment in accordance with Provider's instructions, referenced Codes, specification and approved submittals.
- B. Install machine room equipment with clearances in accordance with referenced Codes and specification.



- C. Install all equipment so it may be easily removed for maintenance and repair.
- D. Install all equipment for ease of maintenance.
- E. Install all equipment to afford maximum accessibility, safety, and continuity of operation.
- F. Remove oil, grease, scale, and other foreign matter from the following equipment and apply one coat of field-applied machinery enamel.
  - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
  - 2. Machine room equipment, hoistway equipment including guide rails, guide rail brackets, and pit equipment.
  - 3. Neatly touch up damaged factory-painted surfaces with original paint color. Protect machine-finish surfaces against corrosion.

#### 3.04 FIELD QUALITY CONTROL

- A. Work at jobsite will be checked during course of installation. Full cooperation with reviewing personnel is mandatory. Accomplish corrective work required prior to performing further installation.
- B. Have Code Authority acceptance inspection performed and complete corrective work.

#### 3.05 ADJUSTMENTS

- A. Install hydraulic jack assembly and guide rails plumb and align vertically with tolerance of 1/16" in 100'-0". Secure guide rail joints without gaps and file any irregularities to a smooth surface.
- B. Static balance car to equalize pressure of guide shoes on guide rails.
- C. Lubricate all equipment in accordance with Provider's instructions.
- D. Adjust motors, valves, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks, and safety devices to achieve required performance levels.

#### 3.06 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials on a daily basis.
- B. Remove all loose materials and filings resulting from work.
- C. Clean machine room equipment and floor.
- D. Clean hoistways, car, car enclosure, entrances, operating and signal fixtures.

#### 3.07 ACCEPTANCE REVIEW AND TESTS

See Section 01700, Article 1.02, Consultant's Final Observation and Review Requirements.

#### 3.08 PURCHASER'S INFORMATION

See Section 01700, Article 1.03, Final Contract Compliance Review.

END OF SECTION

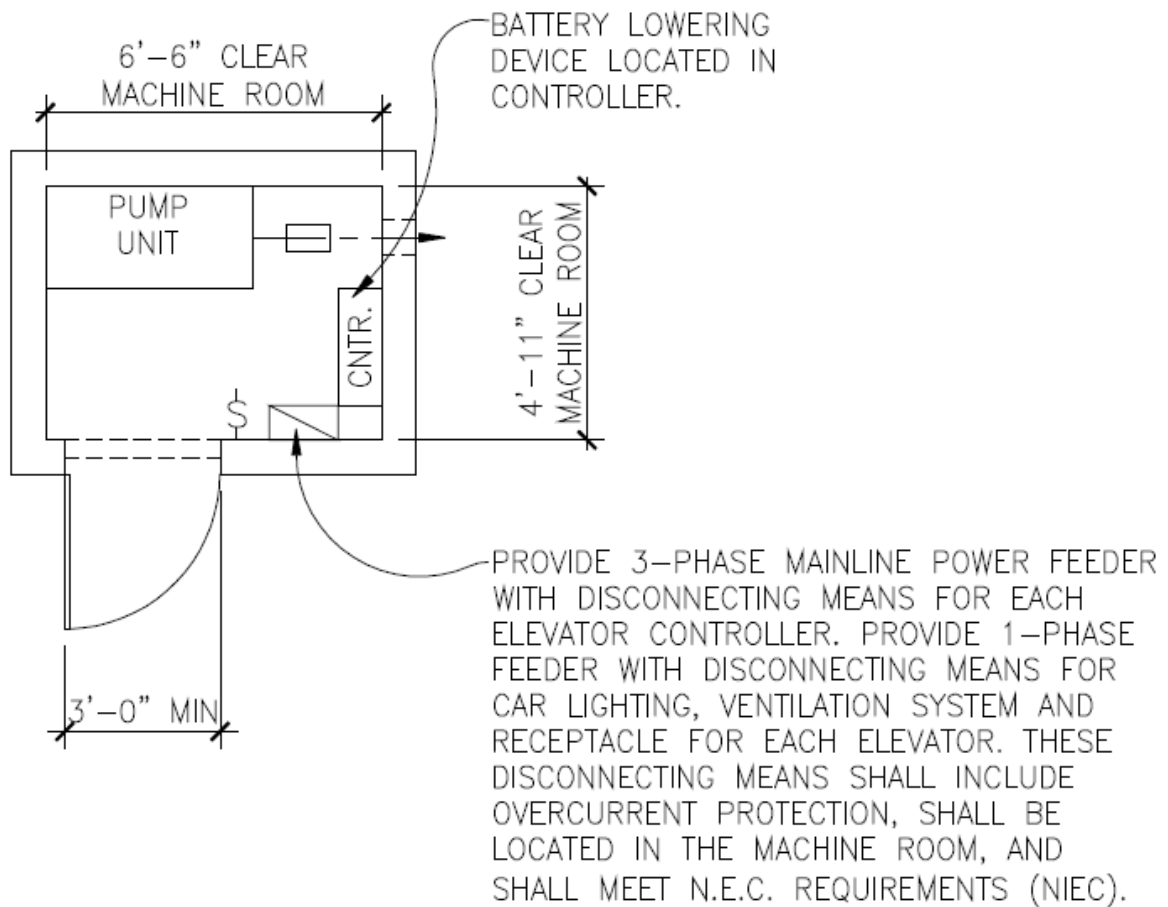
DRAWING

Passenger Elevator Machine Room (Note limited space).



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LB# 010-0000448-03

SALT LAKE COMMUNITY COLLEGE

2/22/2008

EXISTING MACHINE ROOM

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